

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/822,397	03/20/1997	BARRY H. SCHWAB	VID-00203/29	6309
25006 7590 08/27/2007 GIFFORD, KRASS, SPRINKLE, ANDERSON & CITKOWSKI, P.C PO BOX 7021			EXAMINER	
			BROWN, RUEBEN M	
TROY, MI 48007-7021			ART UNIT	PAPER NUMBER
			2623	
			MAIL DATE	DELIVERY MODE
			08/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)		
	08/822,397	SCHWAB ET AL.		
Office Action Summary	Examiner	Art Unit		
	Reuben M. Brown	2623		
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DOWN THE MAILING DOWN THE SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a, cause the application to become AB ANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status				
1) ☐ Responsive to communication(s) filed on  2a) ☐ This action is FINAL. 2b) ☑ This  3) ☐ Since this application is in condition for alloware closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro			
Disposition of Claims				
4) ⊠ Claim(s) <u>18-40</u> is/are pending in the application 4a) Of the above claim(s) <u>1-17</u> is/are withdrawn 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>18-40</u> is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or	n from consideration.			
Application Papers				
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the I drawing(s) be held in abeyance. See tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.				
Attachment(s)  1): Notice of References Cited (PTO-892)	4) Interview Summary			
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO/SB/08)     Paper No(s)/Mail Date	Paper No(s)/Mail Do 5)  Notice of Informal P 6)  Other:			

#### **DETAILED ACTION**

### **Continued Examination**

1. On 8/12/2005, the Board of Patent Appeals & Interferences mailed a Decision on Appeal, which affirmed the 112 1<sup>st</sup> paragraph rejections of claims 18-25. The Board agreed with the examiner that the Specification does not support automatically switching from one transmission medium (such as a satellite channel), to a different transmission medium (such as a cable network), based on a channel change command encoded in a TV program, see pages 6-9.

In particular, on pages 8-9 of the Decision on Appeal, the Board wrote:

Further, we find that originally filed claim 1 does not provide support for appealed independent claim 18. We concur with the examiner's statement, on page 9 of the Examiner's Answer (mailed 3/24/2004):

[w]hile original claim 1 does recite, "selectively route a TV program from any one of the various inputs", the instant claim does not state that the instant TV program is subsequently routed to or through a different input or transmission medium. Instead, original claim 1 recites that the instant TV programs is routed to output for viewing in the display device. Furthermore, even though the claim

recites, "the switching of a particular input being a function of the user-defined channel designations", there is no specific recitation as to how the selective routing of the TV program relates to the switching of a particular input. And certainly there is no explicit recitation that states a TV program on a first transmission medium is switched (e.g., selectively routed) to a second transmission [medium], different from the first transmission medium.

It is noted that page 5 of the Specification, is cited as supporting the subject matter recited in claim 26. A review of page 5 and its continuing discussion onto page 6 shows that in order to retrieve supplemental information, program information is carried on a primary channel, along with additional information used by the system for directing a tuner to a secondary channel, is disclosed. Page 6 provides a further explanation of the technique. "As shown in Figure 2, these features may be implemented with signal separator 52, feeding primary and secondary signals to individual tuners 54A and 54B". Therefore from the above citation and Fig. 2, it is clear that the disclosure *does teach* that both a primary channel and a secondary channel may be transmitted within an input signal, which is then received/separated by signal separator 52, emphasis added. The primary channel and secondary channel, are tuned by tuners 54A & 54B, respectively. As pointed out above, and as affirmed by the Board Decision on Appeal, this disclosure is not the same as automatically switching from a first transmission medium (e.g., satellite channel) to a second transmission medium (e.g., CATV channel) different from the first transmission medium.

The examiner has specific knowledge of the existence of a particular reference or references that indicate non-patentability of the appealed claims. Therefore prosecution is reopened, and a new art rejection on the merits is presented herein, in view of the Decision on Appeal. Pursuant to the above-cited Board decision, claims 26 & 34 are interpreted to have a different scope from claim 18. Finally, the 112, 1<sup>st</sup> paragraph rejection of claim 18, affirmed by the Board, is merely repeated herein.

### Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 18-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Application/Control Number: 08/822,397 Page 5

Art Unit: 2623

Considering claim 18, the claimed feature of, 'automatically switching the TV program to the alternative transmission based on the information previously entered by the viewer without requiring any additional viewer intervention at the time of switching', does not find explicit support in the specification or original claims. Claims 19-25 depend from claim 18, and are thus likewise treated.

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claim 24 & 25 are rejected under 35 U.S.C. 112, second paragraph as lacking antecedent basis. The instant claims 24 & 25 recite the limitation "the pointer is transmitted", in line 1 of each claim. There is insufficient antecedent basis for this limitation in the claims. It is noted that claims 24 & 25 depend from claim 18, however, claim 18 does not recite any pointer, as referred to in claims 24 & 25.

## Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 18-19, 21 & 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Wachob, (U.S. Pat # 5,155,591).

Considering claim 18, the claimed method of automatically changing to an alternate transmission at a TV viewer location, comprising the steps of:

'entering, at the viewer location, information regarding a viewing preference', reads on disclosure in Wachob that a viewer may input channel selection and demographic information using a remote control 120, col. 5, lines 37-67.

'transmitting a TV program from a source to a viewer location', reads on col. 6, lines 26-31.

'receiving the TV program at a viewer location over a first transmission medium', is met by (col. 4, lines 56-67; Fig. 1) and the operation of the converter 10.

'automatically switching the TV program to the alternate transmission medium based on the information previously entered by the viewer without requiring any additional viewer intervention at the time of switching', is met by the discussion in Wachob that the headend transmits information to the subscriber's converter 10, which controls the instant converter 10 to tune to a different channel in order to receive targeted commercials, col. 4, lines 36-55 & col. 6, lines 30-55.

Considering claim 19, Wachob is directed to transmitting to a CATV network, col. 4, lines 26-40.

Considering claim 21, Wachob teaches that the remote control 120 includes channel selection buttons 134, (Fig. 2; col. 5, lines 36-41).

Considering claim 23, Wachob teaches that the headend may download updated or modified demographic data to the subscriber converter 10, which reads on the claimed subject matter, since the headend in Wachob includes a computer, see col. 6, lines 11-26 & col. 9, lines 1-60; Fig. 5.

Considering claims 24-25, see Wachob, col. 6, lines 27-46; col. 7, lines 39-53; col. 10, lines 1-19.

Application/Control Number: 08/822,397 Page 8

Art Unit: 2623

## Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 26, 30-34 & 37-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Hite, (U.S. Pat # 5,774,170).

Considering claim 26, the claimed method of directing an automatic channel changing function at a viewer location to achieve a cohesive viewing environment, comprising the steps of:

'providing a channel selector at a viewer location', reads on the Frequency Selector & Detector 414, which selects frequencies received by the system, see col. 14, lines 1-16.

'transmitting, from a broadcaster to the viewing location, a TV program on a primary transmission medium, the program including additional information for directing the channel selector to automatically switch, at least temporarily, to one or more secondary transmission

Art Unit: 2623

media', is met by the disclosure in Hite that the CID codes which are attached to commercials are used to "tell" the display which upcoming commercials to play (col. 5, lines 40-53). Hite goes on to teach that the invention is accomplished by the Commercial Processor 438 tuning to the appropriate commercial (col. 6, lines 10-35 & col. 14, lines 10-40) by conveying the appropriate signals received by the system to the aforementioned Frequency Selector & Detector 414.

Considering claims 30 & 37, Hite teaches that the invention is applicable to CATV systems, see col. 5, lines 35-45.

Considering claims 31 & 38, Hite teaches that the programming may be in digital form, col. 6, lines 27-35 & col. 10, lines 1-25.

Considering claims 32-33 & 39-40, Hite teaches that the information may be transmitted along with the TV program as in the VBI, which reads on 'transmitted continuously with the TV program', (col. 5, lines 51-55) or at the initiation, i.e., beginning col. 5, lines 39-67.

Considering claim 34, the claimed TV viewing system, comprising;

'a source of an audio/video TV program including a channel-change command' reads on the disclosure in Hite of the Ad Administration Facility 200, which inserts CID codes to

programming, which are used to "tell" the display which upcoming commercials to play, col. 5, lines 39-61 & col. 9, lines 41-65.

'receive the TV program'; 'detect the channel-change command'; 'automatically select a different transmission medium in response to the channel change command', reads on Hite, col. 7, lines 1-34 & col. 14, lines 1-34. The cited portions of the reference teaches that signals are received by the Display Site, the Data Decoder 434 extracts the control information discussed in the invention, and passes it on to the Commercial Processor 438, which then selects the appropriate frequency information and transmits the same to the Frequency Selector and Detector 414, so that the instant appropriate channel will be tuned and received at the Display Site, see col. 13, lines 57-67 thru col. 14, lines 1-35.

10. Claims 26, 30-34 & 37-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Nemirofsky, (WO 94/03995).

Considering claim 26, the claimed method of directing an automatic channel changing function at a viewer location to achieve a cohesive viewing environment, comprising the steps of:

Art Unit: 2623

'providing a channel selector at a viewer location', reads on the tuner/RF converter comprised within the receiver site 54, (Fig. 4; page 13, lines 25-37 thru page 14, lines 1-37).

'transmitting, from a broadcaster to the viewing location, a TV program on a primary transmission medium, the program including additional information for directing the channel selector to automatically switch, at least temporarily, to one or more secondary transmission media', is met by the disclosure in Nemirofsky that the data insertion unit 38 inserts control data, at least into the VBI of the main TV program, see page 10, lines 25-37 thru page 11, lines 1-15, which are used by the receiver 54 to re-tune to the appropriate channel, in order to receive advertisements customized for the instant receiver 54, see page 14, lines 26-40 thru page 15, lines 1-45 & page 19, lines 11-26.

Considering claims 30 & 37, Nemirofsky teaches that the invention is applicable to CATV systems, see page 19, lines 10-15.

Considering claims 31 & 38, Nemirofsky teaches that the programming may be in digital form, page 11, lines 27-39 thru page 12, lines 1-16 & page 15, lines 5-30.

Considering claims 32-33 & 39-40, Nemirofsky teaches that the information may be transmitted along with the TV program as in the VBI, which reads on 'transmitted continuously

with the TV program', (page 11, lines 11-20, page 27, lines 5-9) or at the initiation, (page 5, lines 2-10)

Considering claim 34, the claimed TV viewing system, comprising;

'a source of an audio/video TV program including a channel-change command' reads on the disclosure in Nemirosfky of a data insertion unit 38 that encodes a destination address along with a package of control data, which includes channel change commands, page 3, lines 15-39 thru col. 4, lines 1-20; page 21, lines 10-39; page 23, lines 26-37.

'receive the TV program'; 'detect the channel-change command'; 'automatically select a different transmission medium in response to the channel change command', reads on page 14, lines 12-39 thru page 15, lines 1-30 & page 19, lines 10-27.

## Claim Rejections - 35 USC § 103

- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wachob.

Considering claim 20, Wachob does not teach that the programming may be in digital form. Official Notice is taken that at the time the invention was made, digital TV was well known in the art. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to alternatively operate Wachob using digital TV signals, at least in order to allow for an easier manner of compression, as was known with digital signals.

13. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wachob, in view of Cherrick, (U.S. Pat # 5,528,304).

Considering claim 22, Wachob does not discuss the specifics of a user selecting a TV program. Nevertheless Cherrick, which is in the same field of endeavor, discloses a viewer selecting a TV program, using a remote control 14, with an on-screen program guide, OSPG, (col. 5, lines 61-67 thru col. 6, lines 1-8) which reads on, 'on-screen programming guide' (Fig. 2; col. 3, lines 31-50). It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Wachob using an on-screen programming guide, as taught by

Cherrick at least for the desirable advantage of allowing the viewer the have visual display of the available programming, before making a channel/program selection.

14. Claims 27-29 & 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hite, in view of Cherrick.

Considering claim 27, 'wherein the additional information is derived from preference information entered at the viewer location', Hite does not explicitly disclose such a feature. Hite states that the specific nature of origin of the preference information, such as using various data collection algorithms, was well known in the art, but is not discussed in the disclosure, (col. 10, lines 52-67 thru col. 11, lines 1-35). Nevertheless Cherrick, which is in the same field of endeavor, provides a teaching of a user labeling the station or channel name, using an on-screen menu (Abstract; Fig. 3; col. 3, lines 31-55).

Specifically, Cherrick teaches that the viewer may add/delete channels, as well as add/delete and change the channel labels for the various transmission signals sources, see col. 4, lines 11-67; col. 5, lines 3-67 & Figs. 4-6. It would have been obvious for one ordinary skill in the art at the time the invention was made, to modify Hite with the feature of labeling channels, at least for the desirable purpose allowing the user to customize their display of channels, according to their own preferences, as taught by Cherrick, which reads on the claimed subject matter.

Art Unit: 2623

Considering claims 28-29 & 36, the labeling information in Cherrick is entered with a remote control, using an on-screen programming guide, (col. 4, lines 1-62; col. 5, lines 3-67; Figs. 3-6).

Considering claim 35, 'a device for inputting descriptive information by a viewer; and wherein the multi-channel tuner is also changed to a different station as a function of the descriptive information in response to the channel-change command', Hite does not explicitly disclose such a feature. Nevertheless Cherrick, which is in the same field of endeavor, provides a teaching of a user labeling the station or channel name, using an on-screen menu (Abstract; Fig. 3; col. 3, lines 31-55). The labeling of a station or channel reads on the claimed, 'inputting descriptive information'. Thus, in Cherrick, channels are tuned at least as function of the descriptive information inputted by the viewer.

Specifically, Cherrick teaches that the viewer may add/delete channels, as well as add/delete and change the channel labels for the various transmission signals sources, see col. 4, lines 11-67; col. 5, lines 3-67 & Figs. 4-6. It would have been obvious for one ordinary skill in the art at the time the invention was made, to modify Hite with the feature of labeling channels, at least for the desirable purpose allowing the user to customize their display of channels, according to their own preferences, as taught by Cherrick, which reads on the claimed subject matter.

# Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- A) Carles Teaches transmission and automatic switching of targeted commercials to customers.
- B) Lindstrom Ad insertion method.

Art Unit: 2623

1

Any response to this action should be mailed to:

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

or faxed to:

(571) 273-8300, (for formal communications intended for entry)

Or:

(571) 273-7290 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown whose telephone number is (571) 272-7290. The examiner can normally be reached on M-F (9:00-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communications and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hardel Sacker
WANDA L. WALKER
DIRECTOR
TECHNOLOGY CENTER 2600
Mapering

PATENT EXAMINER

Page 17